Sequence Listing

<110> Verfaille, Catherine
Jiang, Yuehua

<120> Neuronal Differentiation of Stem Cells
<130> 890003-2006.1

<140> US 10/561,826
<141> 2006-10-17

<150> PCTUS04/21553
<151> 2004-07-02

<160> 38

<170> Microsoft Word 2003

<210> 1
<211> 23
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 1

Ala Ala Gly Ala Thr Gly Cys Ala Cys Ala Ala Cys Thr Cys Gly Gly
5 10 15
Ala Gly Ala Thr Cys Ala Gly
20

<210> 2
<211> 25
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 2
Cys Cys Ala Thr Gly Ala Cys Cys Thr Ala Thr Ala Cys Thr Cys Ala
5 10 15
Gly Gly Cys Thr Thr Cys Ala Gly Gly
20 25

<210> 3
<211> 18
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 3
Ala Gly Gly Cys Gly Cys Thr Gly Thr Thr Cys Gly Cys Ala Ala Ala
5 10 15
Gly Ala

<210> 4
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 4
Cys Cys Ala Gly Gly Cys Ala Thr Cys Ala Gly Ala Gly Cys Ala Cys
5 10 15
Ala Thr Cys Ala
20

<210> 5
<211> 21
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 5

Ala Ala Ala Cys Gly Cys Ala Ala Gly Ala Gly Gly Gly Ala Thr Gly
5 10 15
Ala Ala Gly Gly Thr
20

<210> 6
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 6
Thr Gly Thr Gly Thr Gly Gly Cys Ala Cys Cys Thr Gly Gly Ala Gly
5 10 15
Thr Thr Cys Ala
20

<210> 7
<211> 23
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 7
Gly Ala Gly Gly Ala Ala Ala Thr Gly Thr Ala Cys Cys Gly Thr Cys
5 10 15
Thr Gly Ala Thr Gly Cys Thr
20

<210> 8
<211> 23
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 8
Thr Gly Ala Ala Gly Ala Gly Ala Gly Cys Gly Gly Ala Gly Ala Ala
5 10 15
Gly Gly Ala Gly Ala Thr Cys
20

<210> 9
<211> 26
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 9
Gly Ala Gly Ala Ala Gly Ala Cys Ala Gly Thr Gly Ala Gly Gly Cys
5 10 15
Ala Gly Ala Thr Gly Ala Gly Thr Thr Ala
20 25

<210> 10
<211> 25
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 10
Gly Ala Gly Gly Ala Gly Thr Gly Gly Thr Ala Thr Cys Gly Gly Thr
5 10 15
Cys Thr Ala Ala Gly Thr Thr Thr Gly
20 25

<210> 11
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 11
Gly Thr Gly Cys Ala Gly Cys Thr Thr Gly Thr Thr Cys Gly Ala Cys
5 10 15
Thr Cys Cys Gly
20

<210> 12
<211> 22

<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 12
Ala Gly Gly Thr Thr Gly Ala Cys Cys Gly Thr Gly Ala Gly Ala Gly
5 10 15
Cys Thr Gly Ala Ala Thr
20

<210> 13
<211> 22
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 13
Gly Cys Ala Ala Thr Cys Ala Thr Cys Ala Cys Cys Ala Cys Cys Thr
5 10 15
Cys Cys Ala Thr Thr Ala
20

<210> 14
<211> 23
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 14
Ala Gly Thr Thr Cys Thr Cys Cys Cys Ala Gly Gly Ala Cys Ala Thr
5 10 15
Thr Gly Gly Ala Cys Thr Thr
20

<210> 15
<211> 22
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 15
Gly Gly Ala Thr Gly Gly Ala Gly Thr Cys Thr Gly Ala Thr Gly Thr
5 10 15
Cys Ala Cys Cys Ala Ala
20

<210> 16
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 16
Thr Thr Cys Cys Ala Ala Thr Gly Thr Gly Cys Ala Gly Cys Thr Gly
5 10 15
Ala Gly Thr Cys
20

<210> 17
<211> 22
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 17
Thr Gly Thr Ala Ala Thr Cys Cys Gly Gly Gly Thr Gly Thr Thr Cys
5 10 15
Cys Thr Thr Cys Ala Thr
20

<210> 18
<211> 26
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 18
Gly Ala Ala Gly Cys Thr Cys Cys Ala Thr Ala Thr Cys Cys Cys Thr
5 10 15
Gly Gly Gly Thr Gly Gly Ala Ala Ala Gly
20 25

<210> 19
<211> 19
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 19
Cys Cys Thr Cys Cys Thr Cys Gly Cys Gly Cys Ala Thr Gly Ala Ala
5 10 15
Gly Ala Thr

<210> 20
<211> 21
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 20

Cys Gly Thr Cys Thr Gly Thr Gly Thr Gly Cys Cys Thr Gly Ala Cys
5 10 15
Ala Cys Ala Thr Thr
20

<210> 21
<211> 19
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 21
Ala Ala Cys Ala Gly Gly Thr Cys Thr Cys Cys Cys Cys Gly Cys Ala
5 10 15
Thr Cys Thr

<210> 22
<211> 23
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 22
Cys Ala Cys Cys Cys Thr Cys Ala Gly Gly Ala Ala Cys Ala Gly Ala
5 10 15
Gly Thr Gly Ala Cys Thr Thr
20

<210> 23
<211> 25
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 23
Thr Cys Thr Thr Gly Ala Cys Cys Ala Thr Cys Ala Thr Cys Thr Thr
5 10 15
Cys Thr Cys Cys Ala Gly Ala Thr Cys
20 25

<210> 24
<211> 24
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 24
Thr Cys Thr Gly Gly Ala Gly Thr Thr Ala Ala Gly Ala Ala Ala Thr
5 10 15
Cys Gly Gly Ala Gly Cys Thr Gly
20

<210> 25
<211> 21
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 25
Gly Cys Cys Thr Cys Thr Gly Thr Thr Cys Thr Cys Cys Ala Gly Cys
5 10 15
Thr Thr Gly Cys Thr
20

<210> 26
<211> 19
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 26
Gly Cys Cys Gly Cys Thr Cys Thr Ala Gly Gly Gly Ala Cys Thr Cys
5 10 15
Gly Thr Thr

<210> 27
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 27
Ala Thr Gly Cys Thr Cys Thr Cys Thr Gly Gly Cys Thr Cys Cys Thr
5 10 15
Thr Gly Gly Cys
20

<210> 28
<211> 15
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 28
Thr Gly Gly Gly Cys Ala Gly Gly Cys Ala Thr Gly Gly Gly Cys
5 10 15

<210> 29
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 29
Ala Thr Gly Gly Gly Cys Ala Cys Ala Thr Thr Gly Thr Gly Cys Thr
5 10 15
Thr Cys Thr Gly
20

<210> 30
<211> 21
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 30
Ala Cys Ala Cys Ala Gly Cys Cys Cys Ala Ala Ala Cys Thr Cys Cys
5 10 15
Ala Cys Ala Gly Thr
20

<210> 31
<211> 22
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 31
Thr Gly Ala Cys Gly Thr Thr Thr Cys Thr Cys Ala Gly Gly Cys Ala
5 10 15
Thr Thr Ala Ala Gly Cys
20

<210> 32
<211> 20
<212> PRT
<213> Artificial sequence

<220>
<223> Primer

<440> 32
Gly Gly Thr Gly Cys Ala Cys Thr Thr Gly Cys Thr Thr Gly Thr Gly
5 10 15
Cys Ala Gly Thr
20

<210> 33
<211> 288
<212> PRT
<213> Human Basic FGF

<220>
<223> Cytokine

<440> 33

```
Met Val Gly Val Gly Gly Gly Asp Val Glu Asp Val Thr Pro Arg Pro
                  5                  10                  15

Gly Gly Cys Gln Ile Ser Gly Arg Ala Ala Arg Gly Cys Asn Gly Ile
             20                  25                  30

Pro Gly Ala Ala Ala Trp Glu Ala Ala Leu Pro Arg Arg Arg Pro Arg
         35                  40                  45

Arg His Pro Ser Val Asn Pro Arg Ser Arg Ala Ala Gly Ser Pro Arg
     50                  55                  60

Thr Arg Gly Arg Arg Thr Glu Glu Arg Pro Ser Gly Ser Arg Leu Gly
 65                  70                  75                  80

Asp Arg Gly Arg Gly Arg Ala Leu Pro Gly Gly Arg Leu Gly Gly Arg
                 85                  90                  95

Gly Arg Gly Arg Ala Pro Glu Arg Val Gly Gly Arg Gly Arg Gly Arg
            100                 105                 110

Gly Thr Ala Ala Pro Arg Ala Ala Pro Ala Ala Arg Gly Ser Arg Pro
        115                 120                 125

Gly Pro Ala Gly Thr Met Ala Ala Gly Ser Ile Thr Thr Leu Pro Ala
    130                 135                 140

Leu Pro Glu Asp Gly Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys
145                 150                 155                 160

Asp Pro Lys Arg Leu Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile
                165                 170                 175

His Pro Asp Gly Arg Val Asp Gly Val Arg Glu Lys Ser Asp Pro His
            180                 185                 190

Ile Lys Leu Gln Leu Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys
        195                 200                 205

Gly Val Cys Ala Asn Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu
    210                 215                 220

Leu Ala Ser Lys Cys Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu
225                 230                 235                 240

Glu Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp
                245                 250                 255

Tyr Val Ala Leu Lys Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr
            260                 265                 270

Gly Pro Gly Gln Lys Ala Ile Leu Phe Leu Pro Met Ser Ala Lys Ser
        275                 280                 285
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<210> 34
<211> 233
<212> PRT

<213> Human FGF-8

<220>
<223> Cytokine

<440> 34

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Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
                  5                  10                  15

Val Leu Cys Leu Gln Ala Gln Glu Gly Pro Gly Arg Gly Pro Ala Leu
             20                  25                  30

Gly Arg Glu Leu Ala Ser Leu Phe Arg Ala Gly Arg Glu Pro Gln Gly
         35                  40                  45

Val Ser Gln Gln His Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu
     50                  55                  60

Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly
 65                  70                  75                  80

Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu
                 85                  90                  95

Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly
            100                 105                 110

Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met
        115                 120                 125

Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp
    130                 135                 140

Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln
145                 150                 155                 160

Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg
                165                 170                 175

Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu Val His Phe
            180                 185                 190

Met Lys Arg Leu Pro Arg Gly His His Thr Thr Glu Gln Ser Leu Arg
        195                 200                 205

Phe Glu Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser
    210                 215                 220

Gln Arg Thr Trp Ala Pro Glu Pro Arg
225                 230
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<210> 35
<211> 204
<212> PRT
<213> Isoform A

<220>

<223> Cytokine

<440> 35
Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
5 10 15

Val Leu Cys Leu Gln Ala Gln His Val Arg Glu Gln Ser Leu Val Thr
20 25 30

Asp Gln Leu Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg
35 40 45

Thr Ser Gly Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala
50 55 60

Met Ala Glu Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp
65 70 75 80

Thr Phe Gly Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr
85 90 95

Ile Cys Met Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys
100 105 110

Gly Lys Asp Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr
115 120 125

Ala Leu Gln Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg
130 135 140

Lys Gly Arg Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu
145 150 155 160

Val His Phe Met Lys Arg Leu Pro Arg Gly His His Thr Thr Glu Gln
165 170 175

Ser Leu Arg Phe Glu Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu
180 185 190

Arg Gly Ser Gln Arg Thr Trp Ala Pro Glu Pro Arg
195 200

<210> 36
<211> 215
<212> PRT
<213> Isoform B

<220>
<223> Cytokine

<440> 36
Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
5 10 15

Val Leu Cys Leu Gln Ala Gln Val Thr Val Gln Ser Ser Pro Asn Phe
20 25 30

Thr Gln His Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu Ser Arg
35 40 45

```
Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly Lys His
     50                  55                  60

Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu Asp Gly
 65                  70                  75                  80

Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly Ser Arg
                 85                  90                  96

Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met Asn Lys
            100                 105                 110

Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp Cys Val
        115                 120                 125

Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln Asn Ala
    130                 135                 140

Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg Pro Arg
145                 150                 155                 160

Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu Val His Phe Met Lys
                165                 170                 175

Arg Leu Pro Arg Gly His His Thr Thr Glu Gln Ser Leu Arg Phe Glu
            180                 185                 190

Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser Gln Arg
        195                 200                 205

Thr Trp Ala Pro Glu Pro Arg
    210                 215

<210> 37
<211> 233
<212> PRT
<213> Isoform E

<220>
<223> Cytokine

<440> 37
Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
                 5                  10                  15

Val Leu Cys Leu Gln Ala Gln Glu Gly Pro Gly Arg Gly Pro Ala Le
            20                  25                  30

Gly Arg Glu Leu Ala Ser Leu Phe Arg Ala Gly Arg Glu Pro Gln Gly
         35                  40                  45

Val Ser Gln Gln His Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu
     50                  55                  60

Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly
 65                  70                  75                  80

Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu
                 85                  90                  95
```

```
Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly
            100                 105                 110

Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met
        115                 120                 125

Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp
    130                 135                 140

Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln
145                 150                 155                 160

Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg
                165                 170                 175

Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu Val His Phe
            180                 185                 190

Met Lys Arg Leu Pro Arg Gly His His Thr Thr Glu Gln Ser Leu Arg
        195                 200                 205

Phe Glu Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser
    210                 215                 220

Gln Arg Thr Trp Ala Pro Glu Pro Arg
225                 230


<210> 38
<211> 244
<212> PRT
<213> Isoform F

<220>
<223> Cytokine

<440> 38
Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
                  5                  10                  15

Val Leu Cys Leu Gln Ala Gln Glu Gly Pro Gly Arg Gly Pro Ala Leu
             20                  25                  30

Gly Arg Glu Leu Ala Ser Leu Phe Arg Ala Gly Arg Glu Pro Gln Gly
         35                  40                  45

Val Ser Gln Gln Val Thr Val Gln Ser Ser Pro Asn Phe Thr Gln His
     50                  55                  60

Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu Ser Arg Arg Leu Ile
 65                  70                  75                  80

Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly Lys His Val Gln Val
                 85                  90                  95

Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu Asp Gly Asp Pro Phe
            100                 105                 110
```

```
Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly Ser Arg Val Arg Val
        115                 120                 125

Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met Asn Lys Lys Gly Lys
    130                 135                 140

Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp Cys Val Phe Thr Glu
145                 150                 155                 160

Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln Asn Ala Lys Tyr Glu
                165                 170                 175

Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg Pro Arg Lys Gly Ser
            180                 185                 190

Lys Thr Arg Gln His Gln Arg Glu Val His Phe Met Lys Arg Leu Pro
        195                 200                 205

Arg Gly His His Thr Thr Glu Gln Ser Leu Arg Phe Glu Phe Leu Asn
    210                 215                 220

Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser Gln Arg Thr Trp Ala
225                 230                 235                 240

Pro Glu Pro Arg
```